

REMARKS

Reconsideration and withdrawal of the Examiner's rejections under 35 USC § 102(b) is requested in view of the following remarks.

35 USC § 102

The Examiner has rejected claims 1-17 under 35 USC 102(b) as being anticipated by Mermelstein, et al., US 4,844,821; asserting that Mermelstein, et al., teach liquid laundry detergent/fabric conditions compositions (see abstract) wherein an example of such a composition comprises 2.5% organoclay, 0.1% polyethylene oxide (MW 1,000,000), 10% olive oil, and 5% cationic surfactant (col. 22, example 7). The examiner notes in pages 12 and 13 of applicant's specification that organoclays are the preferred particles of their invention and acknowledge that such organoclays are well known in the art and are prepared by methods well known in the art. Accordingly, the examiner concludes that the organoclays described in the specification and those taught by the reference are one and the same, and so with respect to claim limitations drawn to specific functional groups, the examiner maintains these limitations are inherently present in the organoclays of the reference and that as this reference meets all material limitations of the claims at hand, the reference is anticipatory. Applicants respectfully traverse this rejection for reasons discussed below.

The Examiner has rejected claims 1-17 under 35 U.S.C. 102(b) as being anticipated by Speakman, US 3,948,790; asserting that Speakman teaches detergent compositions containing quaternary ammonium clays (see abstract) wherein an example of such a composition comprises coconut soap, tetramethylammonium montmorillonite, builders, and a bleach (col. 12, example 1A). The examiner notes in pages 12 and 13 of applicants' specification that organoclays are the preferred particles of their invention and acknowledge that such organoclays are well known in the art and are prepared by methods well known in the art. Accordingly, the examiner concludes

that the organoclays described in the specification and those taught by the reference are one and the same, and so with respect to claim limitations drawn to specific functional groups, the examiner maintains these limitations are inherently present in the organoclays of the reference and that as this reference meets all material limitations of the claims at hand, the reference is anticipatory. Applicants respectfully traverse this rejection.

Neither Mermelstein, et al., US 4,844,821, nor Speakman, US 3,948,790, disclose or suggest the instant invention as claimed. The water insoluble particles of the present invention have "direct covalent bonds" between the organic groups and the Si or P groups of the layered material (i.e., Si-C and P-C bonds). In order to form the direct bonds of the present invention, the particles must be synthesized from scratch, the functionality (i.e., the "direct covalent bonds" between the organic groups and the Si or P groups) being formed during this synthesis (page 12, line 13 "during its synthesis"). The synthetic routes referred to on pages 12 and 13 of the instant specification produce preferred synthetic functionalized clay particles for use in the compositions of the invention. They are not general organo clays as disclosed in Mermelstein, et al., and Speakman, but "organo (phyllosilicates)" (page 12, line 25), which are different in that they have the aforementioned direct covalent bonds.

The organo clays of Mermelstein, et al., and Speakman are made by the treatment of conventional, preformed (whether natural or synthetic) clays with organic species (both Mermelstein, et al., and Speakman use conventional, natural smectite clays) whereby the organic species is exchanged into the interstitial spaces between the clay layers. This leads to particles with inherently different properties because there is no covalent bond between the organic group and the inorganic clay layer, rather, the association is merely electrostatic.

This is shown in Mermelstein, et al., in e.g. claim 8 " ... the reaction product of an organic compound containing a cation and at least one alkyl group containing at least 10 carbon atoms and a montmorillonite clay" and in Speakman at col. 1, lines 63-68, "...in which clay ... about 10 – 60 molar percent of exchangeable cations are alkyl substituted ammonium ions of the general formula ... "

In contrast, the material described in the present invention is described thus" On page 9, lines 2-6 of the instant specification, "The organic functional groups comprise at least one carbon atom and are directly bound by a covalent bond from a carbon atom in the organic functional group to a silicon or phosphorus atom which forms part of a layer in the water soluble particles."

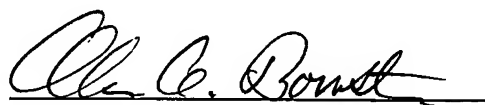
Page 12, lines 11-13 of the instant specification, "The water insoluble particles are preferably of a clay functionalized by the introduction of organic functional groups during its synthesis" and from line 23 to page 13, line 2: "More preferably, the water insoluble functionalized particles are of the general class of inorganic-organic hybrid clays known as an organophyllosilicate ... organic functionality introduced into the clay by assembling a metal oxide/hydroxide framework in the presence of an organotrialkoxysilane".

Therefore, a covalent bond exists between the inorganic and organic components of the particle of the invention and this differentiates it from the use of the conventional organo-exchanged clays of the prior art of record whereby the association is only electrostatic.

CONCLUSION

In light of the above remarks, applicants submit that all claims now pending in the present application are in condition for allowance. Reconsideration and allowance of the application is respectfully requested. If a telephone interview would facilitate prosecution of this application, the Examiner is invited to contact the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Alan A. Bornstein", written over a horizontal line.

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